PODC 2014 Tentative Program  
(As of July 13, 2014)

Tuesday 15 July

16:00 – 19:00  Maurice Herlihy: 60th Birthday Celebration  
19:00 – 21:00  Reception

Wednesday 16 July

08:55 – 09:00  Welcome Address  
09:00 – 10:00  Keynote Address  
   Rational and Resilient Protocols  
       Silvio Micali

10:00 – 10:20  Coffee break

10:20 – 12:00  Session 1: 4 regular talks (Chair: Jennifer Welch)

   10:20  Signature-Free Asynchronous Byzantine Consensus with \( t < n/3 \) and \( O(n^2) \) Messages (Best paper award)  
       Achour Mostefaoui, Hamouma Moumen and Michel Raynal

   10:45  Asynchronous MPC with a Strict Honest Majority Using Non-equivocation  
       Michael Backes, Fabian Bendun, Ashish Choudhury and Aniket Kate

   11:10  Distributing the Setup in Universally Composable Multi-Party Computation  
       Jonathan Katz, Aggelos Kiayias, Hong-Sheng Zhou and Vassilis Zikas

   11:35  A Paradox of Eventual Linearizability in Shared Memory  
       Rachid Guerraoui and Eric Ruppert

12:00 – 13:30  Lunch break

13:30 – 14:09  Session 2: 1 regular talks + 2 brief announcements (Chair: Michel Raynal)

   13:30  The Future(s) of Shared Data Structures  
       Alex Kogan and Maurice Herlihy

       Dan Alistarh, Keren Censor-Hillel and Nir Shavit

   14:02  BA: A Generic Construction for Nonblocking Dual Containers  
       Joseph Izraelevitz and Michael L. Scott.

14:09 – 15:49  Session 3: 4 regular talks (Chair: Stefan Schmid)

   14:09  Multi-Message Broadcast with Abstract MAC Layers and Unreliable Links  
       Mohsen Ghaffari, Erez Kantor, Nancy Lynch and Calvin Newport

   14:34  Consensus with an Abstract MAC Layer  
       Calvin Newport

   14:59  Simple and Efficient Local Codes for Distributed Stable Network Construction  
       Othon Michail and Paul G. Spirakis.

   15:24  Linear-in-\( \Delta \) Lower Bounds in the LOCAL Model  
       Mika Göös, Juho Hirvonen and Jukka Suomela.
15:49 – 16:09  Coffee break

16:09 – 17:24  Session 4: 3 regular talks (Chair: Nitin Vaidya)

16:09  Anonymous Networks: Randomization = 2-Hop Coloring
Yuval Emek, Christoph Pfister, Jochen Seidel and Roger Wattenhofer

16:34  Beyond Set Disjointness: The Communication Complexity of Finding the Intersection
Joshua Brody, Amit Chakrabarti, Ranganath Kondapally, David P. Woodruff and Grigory Yaroslavtsev

16:59  Breathe before Speaking: Efficient Information Dissemination Despite Noisy, Limited and Anonymous Communication
Ofer Feinerman, Bernhard Haeupluer and Amos Korman

17:24 – 18:03  Session 5: 1 regular talk + 2 brief announcements (Chair: Moti Yung)

17:24  Estimation for Monotone Sampling: Competitiveness and Customization
Edith Cohen

17:49  BA: Towards Security and Privacy for Outsourced Data in the Multi-Party Setting
Matteo Maffei, Giulio Malavolta, Manuel Reinert and Dominique Schröder

17:56  BA: Game Theoretical Approach for Energy-Delay Balancing in Distributed Duty-Cycled MAC Protocols of Wireless Networks
Messoud Doudou, Jose M. Barcelo Ordinas, Djamel Djenouri, Jorge Garcia Vidal and Nadjib Badache

18:03 – 20:00  Business meeting and Dijkstra Prize Ceremony

Thursday 17 July

09:00 – 10:00  Keynote Address

Coding Theory for Scalable Media Delivery
Michael Luby

10:00 – 10:20  Coffee break

10:20 – 12:00  Session 6: 4 regular talks (Chair: Alexander Shvartsman)

10:20  Distributed Connectivity Decomposition (Best student paper award)
Keren Censor-Hillel, Mohsen Ghaefari and Fabian Kuhn

10:45  Can Quantum Communication Speed Up Distributed Computation?
Michael Elkin, Hartmut Klauck, Danupon Nanongkai and Gopal Pandurangan

11:10  Optimal Gossip with Direct Addressing
Bernhard Haeupluer and Dahlia Malkhi

11:35  Concurrent Updates with RCU: Search Tree as an Example
Maya Arbel and Hagit Attiya

12:00 – 13:30  Lunch break

13:30 – 14:09  Session 7: 1 regular talk + 2 brief announcements (Chair: Panagiota Fatourou)

13:30  Complexity Tradeoffs for Read and Update Operations
Danny Hendler and Vitaly Khait
13:55 BA: Distributed Universality: Contention-Awareness, Wait-freedom, Object Progress, and Other Properties
*Michel Raynal, Julien Stainer and Gadi Taubenfeld*

14:02 BA: Concurrency-Aware Linearizability
*Nir Hemed and Noam Rinetzky*

14:09 – 15:49 Session 8: 4 regular talks (Chair: Vassos Hadzilacos)

14:09 Software-Improved Hardware Lock Elision
*Yehuda Afek, Amir Levy and Adam Morrison*

14:34 A Generalized Asynchronous Computability Theorem
*Eli Gafni, Petr Kuznetsov and Ciprian Manolescu*

14:59 Balls-into-Leaves: Sub-logarithmic Renaming in Synchronous Message-Passing Systems
*Dan Alistarh, Oksana Denysyuk, Luís Rodrigues and Nir Shavit*

15:24 Dynamic-Sized Nonblocking Hash Tables
*Yujie Liu, Kunlong Zhang and Michael Spear*

15:49 – 16:00 Coffee break

16:00 – 17:40 Session 9: 4 regular talks (Chair: Seth Gilbert)

16:00 Trade-offs between Selection Complexity and Performance when Searching the Plane without Communication
*Christoph Lenzen, Nancy Lynch, Calvin Newport and Tsvetomira Radeva*

16:25 Improved Distributed Steiner Forest Construction
*Christoph Lenzen and Boaz Patt-Shamir*

16:50 Spanners and Sparsifiers in Dynamic Streams
*Michael Kapralov and David P. Woodruff*

17:15 Time Versus Cost Tradeoffs for Deterministic Rendezvous in Networks
*Avery Miller and Andrzej Pelc*

17:40 – 17:50 Short break

17:50 – 19:00 2013 ACM A.M. Turing Award Lecture

An incomplete History of Concurrency Chapter 1. 1965—1977
*Leslie Lamport*

19:15 – 19:30 Words and Champagne Celebration

*** Conference banquet ***

Friday 18 July

09:00 – 10:00 Keynote Address

Rigorous System Design
*Joseph Sifakis.*

10:00 – 10:20 Coffee break

10:20 – 12:00 Session 10: 4 regular talks (Chair: Paul Spirakis)

10:20 How to Withstand Mobile Virus Attacks, Revisited
*Joshua Baron, Karim El Defrawy, Joshua Lampkins and Rafail Ostrovsky*
10:45 Born and Raised Distributively: Fully Distributed Non-Interactive Adaptively-Secure Threshold Signatures with Short Shares
Benoît Libert, Marc Joye and Moti Yung

11:10 Fast and Unconditionally Secure Anonymous Channel
Juan Garay, Clint Givens, Rafail Ostrovsky and Pavel Raykov

11:35 Distributed Algorithms for the Lovász Local Lemma and Graph Coloring
Kai-Min Chung, Seth Pettie and Hsin-Hao Su

12:00 – 13:30 Lunch break

13:30 – 14:34 Session 11: 2 regular talks + 2 brief announcements (Chair: Petr Kuznetsov)

13:30 Efficient Lock-free Binary Search Trees
Bapi Chatterjee, Nhan Nguyen and Philippas Tsigas

13:55 The Amortized Complexity of Non-blocking Binary Search Trees
Faith Ellen, Panagiota Fatourou, Joanna Helga and Eric Ruppert

14:20 BA: Gracefully Degrading Consensus and k-Set Agreement under Dynamic Link Failures
Manfred Schwarz, Kyrill Winkler, Ulrich Schmid, Martin Biely and Peter Robinson

14:27 BA: Local Approximability of Minimum Dominating Set on Planar Graphs
Miikka Hilkke, Christoph Lenzen and Jukka Suomela

14:34 – 16:10 Session 12: 3 regular talks + 3 brief announcements (Chair: Joseph Sifakis)

14:34 Beyond Geometry: Towards Fully Realistic Wireless Models
Marijke H.L. Bodlaender and Magnús M. Halldórsson

14:59 On the Impact of Geometry on Ad Hoc Communication in Wireless Networks
Tomasz Jurdzinski, Dariusz R. Kowalski, Michal Rozanski and Grzegorz Stachowiak

15:24 On the Power of the Congested Clique Model
Andrew Drucker, Fabian Kuhn and Rotem Oshman

15:49 BA: Linial’s Lower Bound Made Easy
Juhana Lauriharju and Jukka Suomela

15:56 BA: Super-Fast t-Ruling Sets
Tushar Bisht, Kishore Kothapalli and Sriram V. Pemmaraju

16:03 BA: Almost-Tight Approximation Distributed Algorithm for Minimum Cut
Danupon Nanongkai

16:10 – 16:30 Coffee break

16:30 – 18:10 Session 13: 4 regular talks (Chair: Luís Rodrigues)

16:30 Making Objects Writable
Zahra Aghazadeh, Wojciech Golab and Philipp Woelfel

16:55 Asynchronous Convex Hull Consensus in the Presence of Crash Faults
Lewis Tseng and Nitin H. Vaidya

17:20 Distributed Computing Building Blocks for Rational Agents
Yehuda Afek, Yehonatan Ginzberg, Shir Landau Feibish and Moshe Sulamy

17:45 Near-Optimal Communication-Time Tradeoff in Fault-Tolerant Computation of Aggregate Functions
Yuda Zhao, Haiying Yu and Binbin Chen